

CST462S Race, Gender, Class in the Digital World  
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## The Social and Economic Impact of Digital Literacy for Seniors

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## Introduction/Research Problem

Older adults face physical and mental barriers when using technology, including reduced physical abilities due to age-related conditions like arthritis and hand tremors, which make handling devices challenging. Additionally, cognitive limitations, fear of mistakes, safety concerns, and difficulty retaining instructions also discourage technology use. Many are apprehensive about potential accidents, such as electric shocks, or unintentionally sharing private information, leading to reluctance in engaging with technology independently (Izadi-Avanji, 2020).

These challenges reveal critical issues: seniors with low digital literacy struggle to access essential services, social connections, and healthcare resources, which are increasingly online. This digital divide often leads to social isolation, reduced independence, and increased reliance on family or caregivers, showing a need for targeted support.

Researching the social and economic impact of digital literacy for seniors is essential. Socially, digital skills could reduce loneliness, improve mental health, and enhance connections with family and community. Economically, digital literacy can empower seniors to access telehealth, financial resources, and government services, reducing healthcare costs and improving quality of life.

This paper will look at the support systems needed to build digital skills among seniors, as well as the social and economic benefits of improved digital literacy. By focusing on these factors, this paper aims to show the broader societal benefits of closing the digital gap for older adults.

## Literature Review

The study *Evaluating the Impact of a Peer-Education Digital Literacy Course on Older Adults' Digital Skills and Wellbeing* examines a peer-led program designed to improve smartphone skills and overall wellbeing for older adults (Pizzul, Sala, Caliandro, Zaccaria, & Carlo, 2024). The program teaches essential skills like using email, accessing government services, and making digital payments, helping seniors manage daily digital tasks with more confidence and independence. A mixed-methods approach gauges the program's impact through smartphone usage tracking, surveys to measure changes in digital skills and wellbeing, and ethnographic observations that capture supportive or challenging social dynamics among participants and peer educators (Pizzul et al., 2024). Themes of peer-led learning and digital skills for social inclusion highlight how a supportive, relatable learning environment can empower seniors and reduce digital isolation. An area for further study could explore the long-term impact of peer-led digital literacy programs on social engagement and quality of life among seniors. This research would deepen understanding of how digital skills training affects senior's relationships with technology and their social integration, emphasizing the need for sustainable and accessible digital education.

Europe's elderly population is projected to double by 2060, with those over 80 increasing from 5% to 12% of the population. As traditional multi-generational households decline, more seniors live independently, lacking younger support for technology use. Although governments are working to improve digital access through legislation and grants, many older adults still face challenges due to insufficient equipment, skills, and complicated authentication processes in digital services. In

Finland, where digitalization is prioritized for efficient public services, over 500,000 individuals aged 55+ do not use the Internet, and a significant number struggle with digital devices. While around 78% of those aged 55–74 access e-services online, usage drops sharply for those over 75, with only 48% of men and 38% of women in that group participating. These gaps highlight age-related disparities in technology adoption and the need for more inclusive digital solutions. Digital services are challenging for seniors due to physical and cognitive declines. An intelligent interface could improve access by assessing each user's abilities and selecting services tailored to their needs. This interface would adjust service levels automatically, offering options like phone support or voice-activated AI assistance. A personalized digital profile stored on a cloud or smart device would adjust services in real-time, using data on the user's age, cognitive level, location, and prior interactions. This customization aims to enhance service accessibility for older adults (Vilpponen, Leikas, & Saariluoma, 2020).

Digital literacy programs offer significant social benefits to seniors, bridging the digital divide and enhancing social integration. A Quasi-experimental study by Lee, Lim, & Nam (2022) claims that among seniors who have participated in digital literacy programs, there has been an increase in activities concerning the use of messaging applications and video calls as social-communicative tools. Digital literacy in seniors also allows them to communicate often with their family and friends, reducing the effects of restricted mobility or geographic distance (Lee et al., 2022). Moreover, other online activities including virtual community events, discussion groups, and remote volunteer options connect seniors to the digital community, reducing isolation and positively impacting their mental health. For example, participation in online groups or classes

connects older adults to modern society, increasing self-esteem and mental condition.

In summation, digital literacy equips seniors with easy access to support networks and local services, provides better connectivity for them to engage in active and positive community participation, and gives them a sense of belonging.

Research Question: What are the social and economic benefits of digital literacy programs for seniors, and how do they impact their quality of life?

Increased digital inclusion among older people connects them with their families, friends, and society, improving their quality of life. Mostly, the elderly who are digitally competent feel less lonely because of the frequent use of social media and communication applications (Mohan, Saleem, Voderhobli & Sheikh-Akbari, 2024). Additionally, a virtual community provides a sense of belonging thanks to the possibility of connecting with individuals with similar interests or experiences, which reduces loneliness and raises their self-esteem. Moreover, digital literacy brings various entertainment, educational, and informational resources to the seniors' fingertips, keeping them mentally active, and reducing their cognitive decline risks (Mohan et al, 2024). Overall, digital literacy empowers the elderly through increased social inclusion, financial independence, and an improved quality of life characterized by reduced isolation and economic resilience.

## Research Design

### Interview Questions

- How do you feel technology has impacted your ability to interact with others and participate in community activities, and what specific benefits or challenges have you experienced in building social connections?
- In what ways has technology supported or hindered your ability to live independently, including its role in improving access to resources, employment opportunities, or managing daily expenses?
- What do you think is the best way for older adults to learn to use new technology to help plan their retirement accounts?
- How would it be beneficial to have devices that could remind you of daily tasks, like taking medication or meeting with senior friends to enhance your social life?
- How has gaining digital literacy skills impacted your ability to access government services, or participate in online marketplaces?
- Do you feel more connected or isolated as a result of using technology for social interactions? Why?

The following outlines how the team will conduct interviews, collect data, identify the target research participant audience, and describe recruitment methods. The target audience includes seniors aged 60+ with varying experiences and comfort levels with technology. Recruitment will focus on seniors connected to team members' sites or personally known individuals who can provide valuable insights into their experiences with digital literacy. Each team member will interview one senior participant, using a

consistent set of questions to ensure uniformity in data collection. Interviews will be conducted using verbal and digital methods, such as phone call, Google Meet, email, and Google Form. Observational data will be collected during the interviews, and raw data will be documented and saved for analysis. The team has agreed to complete all interviews by Sunday, November 24th, to allow sufficient time for review and analysis before the Week 5 deadline.

For Nicole's contribution, she will interview her boyfriend's grandmother, who is new to digital literacy and still faces some challenges but is improving. Nicole will conduct the interview over the phone, taking real-time observation notes in a Google Document. The interview questions will be asked verbally and consistently with the team's agreed-upon format.

Deborah will contact her mom via email or a Google Form to conduct an interview using the same 6 questions that other team members are using. Deborah's mom is the type of senior who is willing to learn technology. The responses will be recorded and analyzed in alignment with the team's format.

Dawn will email her participants and conduct the interviews on Google Meet after getting their consent. Dawn will contact her Community Tech Network volunteer coordinator to assist in recruiting seniors interested in the interview. To accurately record data, each participant will be asked the same questions the other team members are using. Afterward, Dawn will record sessions, and the real-time data will be analyzed in accordance with the project's requirements.

## Service Organizations

Nicole and Deborah are volunteering with The Document Foundation (TDF), a nonprofit organization based in Berlin, Germany, that develops and supports LibreOffice, an open-source office software suite. TDF's mission is to provide free, accessible software to individuals and organizations worldwide. As part of the project, Nicole and Deborah are contributing to bug testing for LibreOffice, identifying and documenting software issues to improve its accessibility and usability. This work aligns with the team's research topic by supporting tools that can enhance digital literacy for underserved populations, including seniors.

Nicole will be interviewing her boyfriend's grandmother, who is outside the service-learning site but fits the target audience of seniors aged 60+ with different levels of digital experience. The participant is newer to digital literacy and still has some challenges, but she's improving, which makes her a good fit to provide insight into how learning technology impacts social inclusion, independence, and quality of life. This interview ties into the research by showing how tools like LibreOffice can support seniors in managing daily tasks and staying connected.

Deborah will interview her mom, who is outside of our service site but fits within the target audience. Her mom is 60+ years old and has limited experience with technology. However, she is very eager to learn how to use it to make her life easier, such as discovering weekly deals on her cell phone apps. She will be a great fit for the interview since she represents the type of senior who could benefit from better understanding and using technology.



Dawn is volunteering with Community Tech Network (CTN), an organization whose fundamental objective is to help adults of all ages benefit from the power of the Internet. As part of this research project, Dawn is working on an introductory presentation on Doordash on how to sign up as a Doordash Customer and use the platform as a customer user, after which Dawn will present it to the seniors over a virtual Zoom platform. This move ties to the research question because it fills in the digital divide gaps through access to technologies and training that enable seniors to navigate online platforms like Community Tech Network (CTN) for empowered economic benefits and social connections.

### Conduct Research

#### Interview Participant: Eileen

The interview was conducted with Eileen, a 77-year-old resident of a retirement community in Tempe, Arizona. She was selected because she fits the target audience for this study, which focuses on seniors and their engagement with digital literacy programs. Additionally, she is Nicole's boyfriend's grandmother, making her an accessible interviewee. Eileen provided valuable insights into how digital literacy affects both the social and economic aspects of her life. Socially, she uses tools like Facebook, FaceTime, and her iPhone to maintain connections with family, friends, and her retirement community. Economically, she relies on technology for online banking, managing retirement accounts, and shopping online. Her experiences highlight both the opportunities and obstacles seniors face when using technology to improve their quality of life, particularly in staying connected and managing financial independence.

#### Interview Participant: Teresa

Deborah interviewed her mom, a 65+ year-old woman who didn't have much experience with technology earlier in life, which makes her a great person to talk to about this topic. Coming from a low-income background, she didn't know how to use a smartphone a few years ago, but now she relies on it daily. She uses apps like Facebook and chat tools to stay connected with friends and family, finds good deals through her phone, and even learned how to use her phone as a remote control for her TV. Despite the challenges of learning new technology later in life, she's open and eager to adapt because she sees how much it simplifies her day-to-day tasks. Her experience shows the potential of technology to make life more convenient for seniors and highlights how accessible tools and support can empower older adults to confidently embrace the digital world.

Interview Participant: William Marrotta

William Marrotta is a 79-year-old retired and active participant in Community Tech Network (CTN), a program for group and individual coaching where Dawn is a volunteer, making it easier to interview him. William also leverages a variety of digital tools to streamline his daily life. This makes him an ideal participant for this research project. Socially, William participates in many social and physical activities such as dancing, and exercise classes and uses technology for self and social interactions. Email, Zoom, and Google Meet also play a key role, allowing him to stay connected with family and friends from a distance. Economically, he uses technological tools to manage his finances and pay bills electronically and uses translator applications such as Google Translate to place orders. Overall, William has embraced technology to simplify practical tasks and stay connected to his social network pursuits.

## Findings

Based on the data collected from the interviews and the Google form for questions #1 and #2, several common themes surface about how technology impacts social connections and independence. All participants agreed that technology has improved their ability to stay connected with others, though their levels of comfort and reliance on it differ. Eileen shared that tools like Facebook and group texts are essential for keeping up with family and community events (Appendix A). Teresa mentioned that learning how to use new technology was initially challenging, but over time, it has made staying in touch with family and friends much easier (Appendix B). William explained that digital literacy has not only helped him connect with others but also allowed him to encourage his peers to get online, even though some prefer face-to-face interactions (Appendix C). When it comes to independence, technology was seen as a helpful tool for managing daily tasks. Eileen relies on apps for banking, shopping, and accessing resources, although she finds tasks like digital coupons or booking flights too complicated (Appendix A). Teresa uses technology for everyday conveniences like ordering food through UberEats (Appendix B). William shared that online bill payments save him time, although he keeps hard copies for accuracy (Appendix C). These findings provide insight into how participants view the role of technology in improving social connections and managing daily responsibilities, based on the questions about staying connected and living independently.

Based on our interviews with three seniors, we also observed common responses to question #3 regarding how they believe they should start learning new technology to help manage their retirement accounts. Eileen mentioned that starting

with a combination of online activities and traditional phone calls would be easier. She uses online research for general purposes but prefers making calls for specific questions (Appendix A). Teresa suggested that seniors should begin with simple tasks, such as checking their bank account balance. Once they feel comfortable, they can move on to learning how to manage their retirement accounts online (Appendix B). Similarly, William proposed a step-by-step approach, recommending that seniors visit a senior center to set up an online account with assistance and gradually build from there (Appendix C). In response to question #4, which asked how beneficial seniors think it would be to have a device that reminds them of daily tasks, all participants agreed on its usefulness. Eileen already uses the Notes app to track medications and allergies and relies on Siri for daily reminders. She said she would struggle without these tools to help her stay organized (Appendix A). Teresa expressed that such a device would help her remember social engagements, like meeting with friends, allowing her to stay connected (Appendix B). William shared that he sets an alarm to go off at 7:00 p.m., prompting him to drink water and take his medication at 7:15 p.m. (Appendix C).

Based on the data collected from the three participants for questions #5 and #6, several themes and trends have emerged about how technology influences social interactions and access to online services. One common theme across the three participants is that technology enhances social interactions, although their choices of digital platforms and usage differ. William frequently uses Zoom, email, and YouTube to stay connected to family and friends, learn new skills (e.g., dancing), and explore hobbies (Appendix C). Eileen stated that she uses Facebook to keep her informed about community activities, while her iPhone allows her to call or text family and friends

(Appendix A). Teresa further mentioned the use of smartphones to keep in touch with family and friends makes her feel more connected (Appendix B). Although digital tools are viewed as a pathway to economic resiliency, some seniors are still cautious about engaging in online shopping or government services due to perceived complexity, shipping costs and taxes, disinterest, or lack of need. William's direct deposit eliminates his use of technology to access Social Security benefits, and he prefers in-person shopping to avoid the cost of shipping (Appendix C). Eileen prefers in-person assistance for government services and only uses online platforms with the help of her son (Appendix A). Although Teresa feels that accessing government services such as social security payment online would be helpful she is yet to try accessing any government service online because she doesn't need it yet and prefers in-person services (Appendix B). Overall, the notable theme here is the selective use of technology based on convenience, personal interest, and familiarity. Seniors like William, Teresa, and Eileen seemingly engage with digital tools primarily for essential tasks rather than exploring broader applications. These findings align with the research question in stressing the need for customized approaches to digital literacy for senior adults based on the questions about accessing government services, online shopping and feeling more connected.

## Conclusions

The interview data from questions #1 and #2 shows that technology has a big impact on seniors' ability to stay connected with family, friends, and their community. All three participants agreed that digital literacy has made it easier to maintain relationships and take part in social activities. Eileen and Teresa both use apps like Facebook, FaceTime, and messaging tools to communicate, while William enjoys using Zoom and YouTube to explore hobbies and learn new skills. Technology also helps seniors live more independently by simplifying daily tasks like managing finances, paying bills, and finding resources. Eileen, Teresa, and William's examples show how these tools can make life easier and give them more control over their routines. However, seniors still face challenges, such as figuring out how to use more complicated features or needing help from family or coaches. This shows that while technology can improve independence, support systems are still important to make it work for everyone. Overall, the research question, "What are the social and economic benefits of digital literacy programs for seniors, and how do they impact their quality of life?" has been answered. Digital literacy helps seniors feel less isolated, stay connected, and handle daily responsibilities better. This improves their overall quality of life and shows why digital literacy programs are so important.

The question #3, "What do you think is the best way for older adults to learn to use new technology to help plan their retirement accounts?", was fully addressed by all three seniors interviewed. Eileen shared that she felt comfortable utilizing online resources and preferred going paperless when managing her retirement account, showing her ability to familiarize herself with new technology in her daily life. Teresa

emphasized starting with simple tasks, such as checking account balances, as a manageable first step for seniors learning new technology. William suggested seeking assistance from a senior center to set up an online account, after which he felt confident he could continue learning independently. Collectively, the three seniors provided thoughtful insights into their learning processes. They explained how they initially approached learning new technology from scratch and gradually incorporated it into their lives, enhancing their ability to manage retirement planning effectively. The question #4, “How would it be beneficial to have devices that could remind you of daily tasks, like taking medication or meeting with senior friends to enhance your social life?”, was fully answered by all three seniors interviewed. Eileen shared that she already uses technology to manage her daily tasks effectively. She tracks her medication and allergies using the Notes app and creates reminders for appointments and tasks using Siri, demonstrating how digital tools support her organization and well-being. Teresa emphasized the importance of having devices that could remind her to meet up with old friends, as she tends to forget such plans with age. This reflects her awareness of how technology could enhance her social connections and quality of life. Similarly, William uses an alarm to maintain his daily routines, such as reminding him to go to the kitchen to drink water at 7:00 a.m. and take his medication at 7:15 a.m. Together, the responses show that all three seniors recognize the benefits of having devices or apps that can help them remember tasks and appointments.

The research questions #5 and #6 have been thoroughly addressed. The findings indicate that apart from eradicating the digital divide, digital literacy reduces social exclusion and financial constraints, improving overall quality of life. The collected

data further reveals a common theme of selective and purposeful technology use by seniors. Although all seniors acknowledge that digital tools have helped to enhance independence and connection, their adoption is limited to specific applications that directly address individual needs and preferences. Therefore, interpreting these findings will help to understand the seniors' needs, and implement customized digital literacy programs that are not only helpful to the seniors but also to the broader community. This, in turn, stresses the further effort needed to narrow the overall digital divide and increase seniors' accessibility to the necessary technologies.



## Recommendations

To address the identified challenges and further support the integration of technology into seniors' lives, the following recommendations are proposed:

1. Customized Digital Literacy Programs:

Programs should be designed specifically for seniors and focus on practical, everyday uses of technology. Starting with simple tasks like checking account balances or creating reminders can build confidence and familiarity. Teresa's suggestion of starting simple and William's idea of seeking help from senior centers highlight how this approach can make learning technology less intimidating and more useful.

2. Accessible Support Systems:

It's important to have easily accessible support options, like helplines or drop-in centers, where seniors can get help with technology when needed. These centers should have staff who are patient and knowledgeable about common issues seniors face, such as troubleshooting, password management, and navigating online services. This kind of support can reduce frustration and make technology more approachable for seniors.

3. Smartphone Training Programs:

Programs designed for seniors should focus on practical, everyday tasks to build confidence and ease their transition into using smartphones. Basics like making calls, sending texts, and setting reminders can make technology more approachable. Such programs can empower seniors to integrate smartphones into their routines and improve their quality of life.

#### 4. Peer Mentorship Programs:

Pairing tech-savvy seniors with those less experienced creates a comfortable and relatable learning environment. Since seniors often understand each other's needs and challenges better, peer mentors can tailor their teaching in meaningful ways. This approach fosters not only digital literacy but also stronger social bonds within the senior community, making the learning experience more enjoyable and effective.

#### 5. Implement Digital Literacy Applications that Align with Senior Preferences:

Given that the seniors have demonstrated a selective and purposeful use of technology, digital literacy programs should prioritize applications that align with their needs and preferences. For example, they can focus on training the seniors on commonly used applications like video calling platforms such as Zoom, Google Meet and WhatsApp, and access to online government services and banking and avoid non-essential tools that overwhelm the seniors.

#### 6. Exploration of Barriers to Adoption:

Examine the barriers preventing seniors from embracing digital technologies, including physical limitations, privacy concerns, or cultural perceptions of technology. For instance, William preferring a direct deposit for his Social Security benefits checks, and both Eileen and Teresa prefer in-person assistance indicates some sort of barrier to fully embracing technology. Overcoming such barriers could improve digital literacy program accessibility and increase the level of usage.

Besides these recommendations, more research is needed to understand how to help seniors with technology. For example, long-term studies could look at how learning digital skills affects seniors' mental health, independence, and social lives. It would also be helpful to study which teaching methods work best, like peer-led classes or one-on-one coaching, to figure out the easiest ways for seniors to learn technology. Understanding these areas better can help create programs that truly meet the needs of seniors and make technology more accessible for them.

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## Appendix A

Phone Interview: Eileen, Age 77 (Nicole's Boyfriend's Grandmother)

1. How do you feel technology has impacted your ability to interact with others and participate in community activities, and what specific benefits or challenges have you experienced in building social connections?

Eileen lives in a retirement community that uses Facebook to share events, activities, and services. She finds it useful for staying informed and connecting with others, such as finding a seamstress in her community. She also uses FaceTime and her iPhone to stay in touch with family and friends, which has become essential for her daily communication. Eileen transitioned from a flip phone to an iPhone about 6-7 years ago and gradually learned to use apps like Facebook, FaceTime, and streaming platforms. While she has adapted, she still relies on her son and daughter-in-law for help with updates, organizing photos, and troubleshooting devices. She avoids unfamiliar features, like Facebook Messenger, and uses group texts to connect with family. Reflecting on her experience, she recognizes how important digital literacy is for her social life and overall connections.

2. In what ways has technology supported or hindered your ability to live independently, including its role in improving access to resources, employment opportunities, or managing daily expenses?

Eileen feels more independent with digital literacy, using online banking to deposit checks, shopping on Amazon, and accessing her 401(k) during retirement. She also uses apps for making reservations and accessing city

resources in Tempe, AZ. Some tasks, like booking flights or purchasing groceries online, have become too complicated, leading her to rely on her daughter-in-law for help. She also struggles with digital coupons, which limits her ability to save money. Eileen enjoys using Google for painting ideas and entertainment, and she frequently plays Solitaire on her phone. Overall, technology is a significant tool for her independence and leisure, despite occasional challenges.

3. What do you think is the best way for older adults to learn to use new technology to help plan their retirement accounts?

Before going on Social Security, Eileen researched online about the process, including eligibility and benefits. She found it convenient to access paperless resources, such as medical reports, bills, and financial statements. Despite appreciating the convenience, she sometimes prints important documents to store as physical copies. When researching retirement accounts and Social Security, Eileen felt comfortable using online resources but preferred calling for specific questions, as she found phone conversations more direct and reliable. She thinks older adults can benefit from a combination of online research and direct support for understanding retirement planning.

4. How would it be beneficial to have devices that could remind you of daily tasks, like taking medication or meeting with senior friends to enhance your social life?

Eileen already uses technology to manage her daily tasks. She tracks medications and allergies using the Notes app and creates reminders for appointments and tasks using Siri. Although she relies on Siri for reminders, she doesn't realize it uses the Reminders app, believing it to be a separate function.

The transition from a paper calendar to a digital one has helped her stay organized. Despite receiving notifications, she sometimes forgets tasks and double-checks the Reminders app. She feels these tools are essential to maintaining her organization and would struggle without them.

5. How has gaining digital literacy skills impacted your ability to access government services, or participate in online marketplaces?

Eileen uses digital tools to access Social Security, renew her car registration, and receive freeway closure alerts through the ADOT app. However, she finds logging into sites frustrating due to password issues and prefers automated notifications. She orders household items on Amazon but prefers shopping for clothes and groceries in person. During the pandemic, she tried online grocery shopping but found it time-consuming and switched back to in-store shopping. For taxes, Eileen hires a professional because she finds it easier and more reliable. While she initially prefers in-person assistance for government services, she transitions to online platforms with help from her son.

6. Do you feel more connected or isolated as a result of using technology for social interactions? Why?

Eileen feels more connected through technology. Facebook keeps her informed about community activities, while her iPhone allows her to call or text family and friends. Although she doesn't send emails, she checks her inbox for community updates, medical clinic notifications, and store coupons. Despite occasional frustrations, she appreciates how technology has enhanced her ability to stay connected and informed.

## Appendix B

Interviewed by Google Form: Teresa Shaw (Deborah's Mom), age: 65+

1. How do you feel technology has impacted your ability to interact with others and participate in community activities, and what specific benefits or challenges have you experienced in building social connections?

1 response

At first, it was tough because I didn't know how to use new technology, but once I got the hang of it, it made a big difference. It's helped me stay connected with friends and family more easily. The hardest part was getting used to it, but now it's been a huge benefit for keeping in touch.

2. In what ways has technology supported or hindered your ability to live independently, including its role in improving access to resources, employment opportunities, or managing daily expenses?

1 response

I wouldn't say I live fully independently, but technology has helped me a lot with small things, like ordering food online or using UberEats. It's made everyday tasks more convenient, even if I'm still learning other aspects.

3. What do you think is the best way for older adults to learn to use new technology to help plan their retirement accounts?

1 response

I think it's best to start simple, like learning to monitor their checking accounts online. Once they're comfortable with that, they can gradually move on to managing and planning investments in their retirement accounts step by step.



4. How would it be beneficial to have devices that could remind you of daily tasks, like taking medication or meeting with senior friends to enhance your social life?

1 response

It would be really helpful because we tend to forget things sometimes, especially as we get older. I'd love a device to remind me about things like meeting up with old friends so I don't miss out on staying connected.

5. How has gaining digital literacy skills impacted your ability to access government services, or participate in online marketplaces?

1 response

I haven't tried accessing government services online yet, but I can imagine it would be really useful.

6. Do you feel more connected or isolated as a result of using technology for social interactions? Why?

1 response

I feel more connected because I can easily chat with my friends and family using my smartphone. It's nice to stay in touch no matter where we are.

## Appendix C

### Zoom Interview: William, Age 79 (Community Tech Network Participant)

This appendix contains the transcription of an interview conducted with William, a senior participant of the Community Tech Network (CTN) which is a program for group and individual coaching. The main aim was to explore William's perspectives and experiences on how digital literacy impacts his life. To ensure clarity and readability, while retaining Williams' responses, I employed the Intelligent Verbatim Transcription. This method helps to capture every word the interviewee speaks while irrelevant fillers like 'yeah', uh, you know, and hesitations that add no meaning to the content.

1. How do you feel technology has impacted your ability to interact with others and participate in community activities, and what specific benefits or challenges have you experienced in building social connections?

William:

Digital literacy has had a big impact on my life. I started with group meetings through CTN, and eventually, I can request to meet with a CTN volunteer on one-on-one coaching sessions, which helped me grow a lot. It's become something of a hobby for me now. As far as community activities it is my main community activity although I do a lot of dancing and exercising at senior centers. I also talk about technology with others and encourage them to get online. At the same time, my strongest social connections come from in-person activities, like dancing and exercising. Those activities give me a sense of community that's hard to replace online. One challenge, though, is that not everyone I know is as interested in using technology. Sometimes I feel like I'm

encouraging others to get online more than they're interested in it. But overall, digital literacy has helped me learn more, connect better, and even assist others with what I've picked up.. So, while I still value face-to-face interactions, technology gives me more ways to connect with people, especially when I'm at home.

2. In what ways has technology supported or hindered your ability to live independently, including its role in improving access to resources, employment opportunities, or managing daily expenses?

William:

One benefit is definitely the flexibility it gives me. For example, I pay my bills online—like my credit card or utility bills—which saves me time and hassle. I still get hard copies in the mail, so I can double-check everything, but once I know it's all correct, I can pay it online in one click. I can pay my PG&E bill using credit cards. It's great for convenience.

3. What do you think is the best way for older adults to learn to use new technology to help plan their retirement accounts?

William:

You do it step by step. You have either a digital coach or you go into a senior center where you can get help. There are different places where you learn a new technology and as far as your retirement benefits are concerned. You can also go to a senior center and set it up where they come back to you online.

4. How would it be beneficial to have devices that could remind you of daily tasks, like taking medication or meeting with senior friends to enhance your social life?

William:

Technology has made managing daily tasks much easier. I actually use that. I take a pill at 7:15. I have that scheduled every night at 7 o'clock when an alarm goes off, I go in the kitchen, drink some water and take my medication. As far as daily tasks, I don't get too much into that because I eat lunch at the senior center, where I am doing the exercise class and the dancing. And in reference to a social life there, I can email people and inquire if we are dancing, if the place is closed or ask what's for lunch. That helps in terms of social life.

5. How has gaining digital literacy skills impacted your ability to access government services, or participate in online marketplaces?

William:

I don't use digital literacy skills for accessing government services or online marketplaces much. My Social Security checks are directly deposited into my bank, so I don't need to interact with that system. As for shopping, I prefer going to stores in person, where I can compare prices and avoid costs like shipping cost and taxes. I use Amazon occasionally, but not often since I don't have a membership and have to pay extra for shipping and taxes, which I try to avoid. I know about services like online grocery pickup, but I haven't used them because I'm not interested. I like to keep my life simple.

6. Do you feel more connected or isolated as a result of using technology for social interactions? Why?

William:

I certainly feel more connected with it. I use Zoom to communicate and help others with their projects. For example, I've worked with Susan on her project, and we connected well. I also use YouTube to learn and explore topics I enjoy, like dancing. It's a great platform for finding information, movies, and tutorials. I can go through a coach, or watch a video, or whatever. Even though I don't comment or interact with others on YouTube, I find it very helpful as I can get whatever information I need such as movies or videos. Also, CTN has created a great business model where they can reach out to college students and their IT techs with experience. The students then use Zoom or Google meet to interface with us. I can now translate in about 75 languages, with any tourists face to face or around the world via Zoom or Google without cost. I also have applications that can translate a foreign restaurant menu or a foreign street sign into English. When it comes to coaching sessions, I interact with my coaches often. They ask what I want to work on, and we collaborate to fine-tune my skills. If I don't understand something, they're always patient and break it down for me. So I really don't feel isolated at this point.